

ABSTRACT

When a beacon (n-1) that is transmitted from a piconet coordinator (PNC) is detected in a MAC layer of the PNC and a MAC layer of a device (DEV), a detection
5 signal is immediately transmitted to a LINK layer. In the LINK layer, a count is made from the detection of the beacon to a predetermined timing to generate a cycle timer. The PNC adds the PNC cycle timer to the subsequent beacon (n) and transmits the beacon to the DEV. In the LINK layer of the DEV, a comparison is made between a
10 DEV cycle timer generated according to the beacon (n-1) and the PNC cycle timer received from the PNC and uses the value of the difference therebetween to correct the DEV cycle timer to be matched with the PNC cycle timer.